GUIDING PRINCIPLES FOR THE LAND TRANSPORT OF ANIMALS

Article 1

Responsibilities

The welfare of animals during their transport is the joint responsibility of all people involved. The roles of each of those responsible are defined below:

- Owners and managers of animals are responsible for the general health of the animals and their fitness for the journey.
- Business or buying/selling agents have a joint responsibility with owners for the selection of animals that are fit to travel. They have a joint responsibility with market owners and managers of facilities at the start and at the end of the journey for the availability of suitable facilities for the assembly, loading, transport, unloading and holding of animals, and for emergencies.
- Animal handlers have a personal responsibility for the humane handling and care of animals, especially during loading and unloading. To carry out these responsibilities, they should be properly trained in these procedures.
- Transport companies, vehicle owners and drivers are responsible for planning the journey to ensure the care of the animals:
 - o transport companies and vehicle owners are responsible for choosing appropriate vehicles and ensuring that properly trained staff are available for loading and caring for animals,
 - o transport companies and vehicle owners are responsible for developing and keeping up to date contingency plans to address emergencies and minimise stress during transport,
 - o drivers are responsible for correct loading of the vehicle, for regular inspections during the journey and for appropriate responses to problems arising. To carry out these responsibilities, drivers should be properly trained in transport regulations, correct vehicle and equipment usage, humane handling and the care of animals.
- Managers of facilities at the start and at the end of the journey, and at staging points are responsible for:
 - o providing suitable premises for loading, unloading and securely holding the animals in lairage, with water and feed, when required, until further transport, sale or other use (including rearing or slaughter),
 - o providing competent animal handlers to load, unload, drive and hold animals in a manner that causes minimum stress and injury,

Responsibilities (contd)

- o minimising the opportunities for disease transmission while the animals are in the facilities,
- o providing appropriate facilities, with water and feed when required,
- o providing appropriate facilities for emergencies,
- o providing facilities for washing and disinfecting vehicles after unloading,
- o providing facilities and veterinarians or competent animal handlers capable of performing euthanasia or urgent slaughter when required,
- o ensuring proper rest times and minimal delay during lairage.
- The responsibilities of *veterinary services* include:
 - establishing minimum standards for animal welfare, including requirements for inspection of animals before, during and after their travel, and appropriate certification and record keeping,
 - o approving vehicles for the transport of animals,
 - o ensuring appropriate awareness and training,
 - o setting licensing standards for drivers, animal handlers and managers,
 - o implementation of the standards, including through accreditation of / interaction with other organisations,
 - o monitoring and evaluating health and welfare performance.
- Private veterinarians and para-professionals involved in transporting animals and the associated handling procedures should receive specialist training.

Training

- All people handling animals in the pre or post-journey periods or driving transport vehicles, or
 who are otherwise responsible for animals during journeys, should receive adequate training
 according to their responsibilities listed in Article 4.
- Training courses should be provided by formal educational institutions such as veterinary faculties.
- The training courses should address:
 - o animal behaviour, physiology, and general signs of disease, in relation to pain and indicators of poor animal welfare such as pain and fatigue,
 - o transport regulations,
 - o methods of animal handling during transport and associated activities such as assembling, loading, unloading, and driving,
 - methods of inspecting animals, managing situations frequently encountered during transport such as adverse weather conditions, and dealing with emergencies,
 - o species-specific aspects of animal handling and care, whenever necessary.

Documentation

- Animals should not be loaded until the required documentation is complete.
- The documentation accompanying the consignment (the journey log) should include:
 o journey travel plan,
 - o date, time, and place of loading,
 - o veterinary certification, when required,
 - o driver's competencies,
 - o animal identification to allow traceback of individual animals to the premises of departure, and where possible to the premises of origin,
 - o details of animals at risk,
 - o documentation of the period of rest, and access to feed and water prior to the journey,
 - o stocking density estimate for each load in the consignment.
- When veterinary certification is required to accompany consignments of animals, it should include:
 - o appropriate animal identification (description, number, etc.),
 - o health status including test, treatment and vaccination status,
 - o factors affecting fitness to travel.

Planning the journey

General

- Adequate planning is a key factor affecting the welfare of animals during a journey.
- Regulations concerning drivers (for example maximum driving periods) should be harmonised with maximum transport journey intervals appropriate for the species.
- Before initiation of travel, plans should be made in relation to:
 - o type of transport vehicle required,
 - o route, taking into account distance, type and quality of road, topography, traffic conditions, availability of resting sites for animals and drivers, and
 - o duration of journey.
- There should be planning for water and feed availability during the journey. Feed should be of appropriate quality and composition for the species, age, condition of the animals, climatic conditions, etc.
- Animals should be rested at staging posts at appropriate intervals during the journey. The type
 of transport and species being transported should determine the frequency of rest stops and
 whether the animals are unloaded. There should be planning for water and feed availability
 during rest stops.
- Extreme weather conditions are hazards for animals undergoing transport and require appropriate vehicle design to minimise risks. Special precautions should be taken for animals that have not been acclimatised or which are unsuited to either hot or cold conditions. In some extreme conditions of heat or cold, animals should not be transported at all. Animals such as pigs which are adversely affected by moderately high temperatures may need to be transported at night.
- In some species, transportation during the night may reduce external stimuli, resulting in lower stress levels.
- Behaviour-modifying medication should not be used routinely during transport. Such medicines should only be administered when a problem exists in an individual animal, and should be administered by a veterinarian or other person who has been instructed in their use by a veterinarian.
- As animal transport is often a significant factor in the spread of infectious diseases, journey planning should take the following into account:
 - o mixing of animals from different sources in a single consignment should be minimised,

Planning the journey (contd)

- o contact at staging points between animals from different sources should be avoided,
- o the use of markets should be minimised,
- o when possible, animals should be vaccinated against diseases to which they are likely to be exposed at their destination,
- o medications used prophylactically or therapeutically should only be administered by a veterinarian or other person who has been instructed in their use by a veterinarian.

Vehicle design and maintenance

- Vehicles used for the transport of animals should be designed, constructed and fitted as
 appropriate to the species, size and weight of the animals to be transported; special attention
 should be paid to the avoidance of injury to animals through the use of secure smooth fittings
 free from sharp protrusions.
- In order to minimise the likelihood of the spread of pathogenic agents during transport, vehicles should be designed to permit thorough cleaning and disinfection, and the containment of faeces and urine during a journey.
- Vehicles should be maintained in good mechanical and structural condition.
- Vehicles should have adequate ventilation which can be adjusted to meet variations in climate and the needs of the animal species being transported.
- Vehicles should be designed so that the faeces or urine from animals on upper levels do not soil animals on lower levels.
- When road or rail vehicles are carried on board ferries, facilities for adequately securing them should be available.
- If feeding or watering while the vehicle is moving may be required, adequate facilities on the vehicle should be available.
- Sand or other appropriate material should be used in vehicles when the floor is slippery, for example in icy conditions.

Planning the journey (contd)

• Suitable bedding, such as straw or wood shavings, should be added to vehicle floors to assist absorption of urine and faeces, provide better footing for animals and protect animals (especially young animals) from hard flooring surfaces and adverse weather conditions.

Containers

- The above principles apply also to containers used for the transport of animals.
- Containers carried on vehicles should be adequately secured.

Ability to inspect animals en route in relation to journey duration

- Animals should be positioned to enable them to be inspected regularly during the journey to ensure their safety and good welfare, for example at compulsory driver rest points. The first inspection should be undertaken shortly after departure.
- To allow an adequate inspection of animals en route, it should be possible for each animal to be clearly observed by the driver or other responsible person.
- If the animals are in crates or on multi-tiered vehicles which do not allow free access for observation, for example where the roof of the tier is too low (i.e. less than 1.3 m), animals cannot be inspected adequately, and serious injury or disease could go undetected. In these circumstances, a shorter journey duration should be allowed and the maximum duration will vary according to the rate at which problems arise in the species and under the conditions of transport.

Space allowance

- The number of animals which should be transported on a vehicle and their allocation to different compartments on the vehicle should be determined before the vehicle is loaded.
- The space required on vehicles depends upon whether or not the animals need to lie down (for example pigs and poultry), or to stand (horses). Most animals will stand when first loaded and if a vehicle is driven badly, so these situations do not indicate the animals' needs.

Planning the journey (contd)

- Calculations according to the space allowance permitted for each animal should be carried out, using the figures given in these guidelines or, in their absence, in a relevant national or international document. The size of existing groups will affect the number and size of the pens, and the distribution of animals in pens on the vehicle.
- The amount of headroom necessary depends on the species of animal. Each animal should be able to assume its natural position for transport (including during loading and unloading) without coming into contact with the roof or upper deck of the vehicle.
- Animals should have sufficient space to adopt a braced standing position without contacting other animals.
- Where animals lie down, they should be able to adopt a comfortable, normal lying posture which allows necessary thermoregulation. There should be space for the animal to carry out normal lying down and standing up movements.
- The same principles apply when animals are transported in containers.

Article 5

Pre-journey period

General

- Pre-journey rest is necessary if the welfare of animals has become poor during the collection period because of major physical or social problems.
- The provision of feed and water pre-journey is necessary if the journey duration is greater than the normal inter-feeding and drinking interval for the animal.
- For animals such as pigs which are susceptible to motion sickness, and in order to reduce urine and faeces production during the journey, a short period of feed deprivation prior to loading is desirable.
- When animals will be provided with a novel diet or method of water provision during or after transport, an adequate period of pre-exposure is necessary.

Pre-journey period (contd)

- All vehicles and containers for animals should be thoroughly cleaned and, if necessary disinfected before animals are loaded.
- Before a journey, animals should be inspected, where possible by a veterinarian.

Selection of compatible groups

- Compatible groups should be selected before transport to avoid adverse animal welfare consequences. The following guidelines should be applied when assembling groups of animals:
 - o animals of different species should not be mixed unless they have been reared together for a long period,
 - o animals of the same species can be mixed unless there is a significant likelihood of aggression,
 - o young or small animals should be separated from older or larger animals,
 - o animals with horns or antlers should not be mixed with animals lacking horns and antlers,
 - o aggressive individuals should be segregated,
 - o animals reared together should be maintained as a group; animals with a strong social bond, such as a dam and offspring, should be transported together.

Effect of travel experience, long and short term

- Consideration should be given to an animal's previous transport experience, training and conditioning as these may reduce fear and stress in animals. Animals that are carefully and regularly transported may show less adverse responses to transport.
- Exposure to familiar personnel should reduce the fearfulness of animals and improve their approachability during transport procedures.

Fitness to travel

• Animals found unfit to travel following inspection by farm staff, drivers or veterinarians should not be loaded onto a vehicle, except for transport to receive veterinary treatment.

Pre-journey period (contd)

- Humane and effective arrangements should be made by the owner or agent for the handling and care of any animal rejected as unfit to travel.
- Animals that are unfit to travel include:
 - o those that are sick, injured, weak, disabled or fatigued,
 - o those that are unable to stand unaided and bear weight on each leg,
 - o those that are blind in both eyes,
 - o those that cannot be moved without causing them additional suffering,
 - o pregnant animals which are likely to give birth during the journey,
 - o in hot and cold weather, those whose body condition would result in poor welfare.
- Risks during transport can be reduced by selecting animals best suited to the conditions of travel and those that are acclimatised to expected weather conditions.
- Animals at risk and requiring better conditions and additional attention during transport (such as in facility and vehicle design, and animal handling) include:
 - o very large or obese individuals,
 - o very young or old animals,
 - o wild or feral animals,
 - o excitable or aggressive animals,
 - o animals which have had little contact with humans,
 - o females in late pregnancy or heavy lactation,
 - o those with a history of exposure to stressors or pathogenic agents prior to transport.

Specific species requirements

Transport procedures should be able to take account of variations in the behaviour of the species. Flight zones, social interactions and other behaviour vary significantly among species and even within species. Facilities and handling procedures that are successful with one species are often ineffective or dangerous with another.

• Recommendations for specific species are described in detail in Appendices XXX.

Pre-journey period (contd)

Shelter in the holding area

- Holding areas should be designed to:
 - securely contain the animals,
 - maintain a safe environment from hazards, including predators and disease,
 - protect animals from exposure to severe weather conditions, and
 - allow for companionship, rest, watering and feeding.

Article 6

Loading

Experienced supervision

- Since loading has been shown to be the procedure most likely to be the cause of poor welfare in transported animals, the methods to be used should be carefully planned.
- Loading should be supervised by competent animal handlers with knowledge and experience of the behavioural and physical characteristics of the animal species being loaded. These animal handlers should ensure that animals are loaded quietly and without unnecessary noise, harassment or force, and that untrained assistants or spectators do not impede the process.

Facilities

• The facilities for loading including the collecting area, races and loading ramps should be designed and constructed to take into account of the needs and abilities of the animals with regard to dimensions, slopes, surfaces, absence of sharp projections, flooring, etc.

Article 6 Loading (contd)

- All loading facilities should be properly illuminated to allow the animals to be easily inspected
 by the handler(s), and to allow the animals' ease of movement at all times. Facilities should
 provide uniform lighting directly over approaches to sorting pens, chutes, loading ramps, and
 entrance to transport vehicles.
- Before each journey, vehicles should be thoroughly cleaned and disinfected, and when necessary cleaned of arthropod and other parasites for animal and public health purposes, using chemicals approved by the *Veterinary Authority*. When these procedures are necessary during a journey, they should be carried out with the minimum of stress to the animals.
- Ventilation during loading and the journey should provide for fresh air, the removal of heat
 and noxious fumes, and the prevention of accumulations of ammonia and carbon dioxide.
 Under warm and hot conditions, ventilation should allow for the adequate convective cooling
 of each animal. In some instances, adequate ventilation can be achieved by increasing the
 space allowance for animals. Likely hotspots should be identified and rectified.

Goads and other aids

- The following principles should apply:
 - o Force should not be used on animals that have little or no room to move.
 - O Battery powered electric prods only should be used and their use restricted to that necessary to assist the movement of the animals. Goads should not be used on sensitive areas such as the eyes, mouth, anogenital regions or belly.
 - o Electric prods and twitches should not be used on horses.
 - o Flappers (a length of cane with a short strap of leather or canvas attached) or "metallic rattles" should be used in place of goads or sticks as they encourage movement in response to sound.
 - O Canvas slappers, boards, canes or other materials used as an extension of the arm to direct animals are useful and permitted aids for handling.
 - o The use of well trained dogs to help with the loading of some species may be acceptable.
 - O Large sticks, sticks with sharp ends, lengths of metal piping, fencing wire or heavy leather belts should not be used to strike animals.
 - O Manual lifting is permissible for young animals that may have difficulty negotiating ramps, but the grasping or lifting of sheep or other species by their wool or hair should not be permitted.

Travel

- Drivers should check the load immediately before departure to ensure that the animals have been properly loaded. Each load should be checked again early in the trip and adjustments made as appropriate. Periodic checks should be made throughout the trip.
- Drivers should utilise smooth, defensive driving techniques, without sudden turns or stops to minimise uncontrolled movements of the animals.

Methods of restraining or containing animals

- Methods of restraining animals should be appropriate to the species involved and the training
 of the individual animal.
- Recommendations for specific species are described in detail in Appendices XXX.

Regulating microclimate, including during journey stops

- Animals should be protected against harm from hot or cold conditions during travel.
 Procedures for maintaining microclimate in vehicles will vary between cold and hot, humid
 conditions but will require similar prevention against the build-up of noxious gases and carbon
 dioxide.
- Microclimate in hot weather can be regulated by the flow of air produced by the movement of the vehicle. In warm and hot weather, the duration of journey stops should be minimised and vehicles should be parked in shade.

Sick and injured animals

- Animals should not travel or rest on a surface covered with urine or faeces so, when necessary, urine and faeces should be removed from floors in a way which will not lead to spread of disease.
- During travel, sick or dead animals should be reported to the nearest *Veterinary Authority*, so that appropriate sanitary measures can be taken and the disposal of dead animals determined.
- During the journey, when disposal of a body, manure or litter becomes necessary, this should be carried out in such a way as to prevent the transmission of disease and in compliance with all relevant health and environmental legislation.
- Ferries (roll-on roll-off) should have facilities to isolate sick, injured or dead animals during the journey.

Travel (contd)

- In order to reduce the likelihood that animal transport will increase the spread of infectious disease, contact between transported animals, or the products of the transported animals, and other farm animals should be minimised.
- When animals are transported to a farm, they should be isolated on arrival at the farm.

Water and feed requirements

- If journey duration is such that feeding or watering is required or if the species requires food or water throughout, access to suitable feed and water for all the animals carried in the vehicle should be provided and there should be adequate space for all animals to move to the food and water sources and due account taken of likely competition for food.
- The maximum periods of deprivation of water and food for different species are described in Appendix XXX.

Journey nature and duration

- The maximum journey time for each load will depend on the conditions under which the journey takes place, including space allowances, vehicle design, road conditions, driving quality, the ability of the animals to cope with the stress of transport (such as very young, old or pregnant animals), the animals' previous transport experiences, and adverse weather conditions.
- The increase in fatigue, need for food and water, and susceptibility to injury and disease with increasing duration of the journey, should be taken into account.

Rest periods and conditions including hygiene

- Animals that are being transported should be rested at appropriated intervals during the
 journey and offered food and water, either on the vehicle or, if necessary, unloaded into
 suitable facilities.
- Suitable facilities should be used en route, when resting requires the unloading of the animals.
 These facilities should meet the needs of the particular animal species and should allow access of all animals to feed and water.

In-transit inspections

• Consignments by road should be inspected soon after a journey is commenced and after that, at least every 2–3 hours as well as whenever the driver has a rest stop. After meal breaks and refuelling stops, the animals should be inspected immediately prior to departure.

Travel (contd)

- Every opportunity must be taken to inspect the animals during rail transport. The rail transporter should monitor the progress of trains carrying cattle and take all appropriate action to minimise delays.
- Inspections should be made during stops to ensure that animals are properly confined, that they have enough food and water and that their physical condition is satisfactory.

Emergency procedures - training and authority

- When euthanasia is necessary, the person responsible for the animals must ensure that it is
 carried out humanely and results in immediate death. When necessary, assistance should be
 sought from a veterinarian or other person(s) trained and competent in euthanasia procedures.
- Recommendations for specific species are described in detail in Appendices XXX.

Article 8

Unloading and post-journey handling

General

- The principles of good animal handling during loading apply equally during unloading.
- Animals should be unloaded from the vehicle into appropriate facilities as soon as possible
 after arrival at the destination but sufficient time should be allowed for unloading to proceed
 quietly and without unnecessary noise, harassment or force.
- Unloading should be supervised by competent animal handlers with knowledge and experience of the behavioural and physical characteristics of the species being unloaded.
- Facilities should provide all animals with appropriate care and comfort, adequate space, access to quality feed and clean drinking water, and shelter from extreme weather conditions.

Unloading and post-journey handling

Sick and injured animals

- An animal that becomes sick, injured or disabled during a journey must be taken to the nearest appropriate place for treatment. The driver should notify and transfer responsibility of the animal's welfare to a suitable person at the destination. When necessary, veterinary advice should be sought in the care and treatment of these animals.
- There should be appropriate facilities and equipment for the humane unloading of animals that are non-ambulatory due to fatigue, injury or sickness. These animals should be unloaded in a manner that causes the least amount of suffering. After unloading, separate pens and other appropriate facilities should be available for sick or injured animals.

Animal health procedures (e.g. quarantine)

- The following should be taken into account in addressing the greater risk of disease due to the stress of transport:
 - o the extent of resistance of pathogens to environmental changes,
 - o an increase in disease levels due to immunosuppression,
 - o enhanced infectiousness transmission of a pathogenic agent with shedding from an infected host through oronasal fluids, respiratory aerosols, faeces or other secretions or excretions; for example rota virus through faeces and bovine herpesvirus-1 (BHV-1) through the respiratory route,
 - o enhanced contact survivability of pathogen increases with close contact,
 - o pathogenic agents resistant to environmental factors contamination of vehicles, staging points, markets, will be a source of indirect transmission to animals by pathogens resistant to environmental conditions.
- Animals which could have become infected during the journey should be examined by qualified personnel after unloading and if necessary either quarantined or slaughtered.

Facilities

- Unloading can be associated with traumatic experiences for animals; so procedures should be planned and facilities carefully designed to facilitate unloading without poor welfare.
- Animals should be given adequate opportunity to familiarise themselves before attempts are made to move them.

Unloading and post-journey handling

Facilities (contd)

- Animals which have been transported are likely to be fatigued and should be handled carefully.
- All unloading facilities should be properly illuminated to allow the animals to be easily inspected by the handler(s), and to allow the animals' ease of movement at all times. Facilities should provide uniform lighting directly over approaches to sorting pens, chutes, unloading ramps and the entrance to the transport vehicle.

Cleaning and disinfection

- Disposal of a body, manure, litter or bedding after unloading should be carried out in such a
 way as to prevent the transmission of disease and in compliance with all relevant health and
 environmental legislation.
- Vehicles, crates, containers, etc. used to carry the animals should be cleaned and disinfected before re-use. This includes the physical removal of manure and bedding by scraping, washing and flushing vehicles and containers with water and detergent, followed by disinfection.
- Establishments like livestock markets, slaughterhouses, resting sites, railway stations, etc.
 where animals are unloaded should be provided with appropriate areas for the cleaning and
 disinfection of vehicles.
- Precautions should be taken to protect the unloaded animals against local diseases at destination, for example through insect proofing.
- Where disinfestation is necessary, it should be carried out with the minimum stress to the animals.

Ventilation

• Shelter such as shade, windbreaks, open or closed sheds (depending upon weather conditions) is required to protect animals that are likely to be tired after a journey and to allow recovery and the restoration of normal feeding, drinking and resting patterns. Closed sheds should be well ventilated to prevent the build-up of heat.

Feed and water

 All animals should be offered water and feed as soon as possible after the end of the journey.